

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-357. Canceled.

358. (New) A method for performing operations on a stainer in a stainer network comprising:

establishing a network connection between a computer and a stainer in the stainer network;

sending commands from the computer to the stainer over the network connection;

processing a first sample with the stainer using the commands received from the first computer, wherein said processing comprises dispensing reagents with a robotic head; and

inserting at least one reagent or a second sample into the stainer without interrupting the dispensing of reagents onto the first sample with the robotic head.

359. (New) The method of claim 358, wherein the computer is a server and wherein the stainer is a client of the server.

360. (New) The method of claim 359, wherein the server includes a centralized database including configuration information for the stainer.

361. (New) The method of claim 358, wherein the stainer network is connected to a laboratory information system.

362. (New) The method of claim 361, further including sending commands and queries from the laboratory information system to a database associated with the stainer, wherein the database comprises information including status information on stainers, slides, consumables, and treatment protocols associated with the stainer.

363. (New) The method of claim 362, wherein the commands and queries further comprise database maintenance operations including purging, compaction, and database back-up operations.

364. (New) The method of claim 358, further comprising running diagnostic tests and retrieving diagnostic information.

365. (New) The method of claim 364, further comprising running diagnostic tests to actively exercise components on the stainer.

366. (New) The method of claim 365, further comprising troubleshooting the stainer.

367. (New) The method of claim 365, further comprising electronically notifying an operator about the results of the diagnostic tests.

368. (New) The method of claim 358, further comprising performing operations on the stainer while operating other stainers in the stainer network, wherein the operations of the other stainers are not materially affected by the operations of the stainer.

369. (New) The method of claim 358, further comprising monitoring a status of at least one of the first sample or the second sample in the stainer.

370. (New) The method of claim 358, further comprising obtaining a real-time estimate of a completion time of the first sample being processed by the stainer.

371. (New) The method of claim 358, further comprising encrypting the commands sent over the network connection.

372. (New) A method for performing operations on a stainer in a stainer network comprising:

- establishing a network connection between a computer and a stainer in the stainer network;
- sending commands from the computer to the stainer over the network connection;

sending queries from a laboratory information system connected to the network to a database, wherein the database contains status information chosen from slides on the stainer, amounts of consumables on the stainer or treatment protocols performed on the stainer;

processing a first sample with the stainer using the commands received from the computer, wherein said processing comprises dispensing reagents with a robotic head; and

inserting at least one reagent or a second sample into the stainer without interrupting the dispensing of reagents with the robotic head onto the first sample.

373. (New) The method of claim 372, wherein the stainer network further includes a server and a plurality of stainers including the stainer, and wherein the stainer is a client of the server.

374. (New) The method of claim 373, wherein the server includes a centralized database comprising configuration information for the stainer.

375. (New) The method of claim 372, wherein the commands and the queries further comprise database maintenance operations including purging, compaction, and database back-up operations.

376. (New) The method of claim 372, wherein the stainer is a first stainer, the method further comprising sending the commands to a second stainer when the first stainer malfunctions.

377. (New) The method of claim 376, further comprising running diagnostic tests and retrieving diagnostic information.

378. (New) The method of claim 377, further comprising running diagnostic tests to actively exercise components on the stainer.

379. (New) The method of claim 378, further comprising troubleshooting the stainer.

380. (New) The method of claim 378, further comprising electronically notifying an operator about the results of the diagnostic tests.

381. (New) The method of claim 372, wherein the stainer is configured to be controlled from a remote location.

382. (New) The method of claim 372, further comprising performing operations on the stainer while operating other stainers in the stainer network, wherein the operations of the other stainers are not materially affected by the operations of the stainer.

383. (New) The method of claim 372, further comprising monitoring the status of at least one of the first sample or the second sample in the stainer.

384. (New) The method of claim 372, further comprising obtaining a real-time estimate of the completion time of the first sample being processed by the stainer.

385. (New) The method of claim 372, further comprising encrypting the commands and the queries sent over the network connection.